

**CLAIMS**

What is claimed is:

- 5        1. A computerized method of saving version and product information of at least one library in an executable program, comprising:  
            creating a version source file for the at least one library, the at least one library having a name and containing one or more functions and the version source file containing version and product information pertaining to the at least one library;  
            compiling the version source file to create a version object file;  
10        rebuilding the at least one library to include the version object file; and  
            building the executable program to include the at least one library such that the version and product information in the version object file is combined into the executable program.
- 15        2. A method of saving as recited in claim 1, wherein the step of creating the version of the source file includes:  
            constructing a version string, the version string containing version and product identification information pertaining to the library;  
            combining function symbols with the version string to form a version function;  
            creating a version source file whose name includes a keyword and the name of the at least one library; and  
            storing the version function in the version source file.
- 20        3. A method of saving as recited in claim 1,  
            wherein the step of creating the version source file includes:  
25        constructing a version string, the version string containing version and product identification information pertaining to the library;  
            combining a build identifier and function symbols with the version string to form a name of a build-identified version function;  
            creating a version source file whose name includes a keyword and the name of the library; and  
30        storing the build-identified version function in the version source file.

4. A method of saving as recited in claim 3, wherein the build identifier is a date on which the build occurs.

5 5. A method of saving as recited in claim 3, wherein the build identifier is a number that uniquely identifies the build.

6. A method of saving as recited in claim 3, wherein the build identifier is an identifier of a user that performs the build.

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7. A method of saving as recited in claim 1, wherein the step of rebuilding the library includes:  
removing any version object file from the library; and  
remaking the library to include the version object file.

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8. A method of saving as recited in claim 1, wherein building the executable includes:  
creating a temporary storage area;  
obtaining the version object file from the library, the version object file having a name that includes a keyword and the name of the library in which the version object file resides;  
storing the version object file in the temporary storage area; and  
compiling into the executable the stored version object file so that the executable contains the version and product information pertaining to the library.

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9. A method of saving as recited in claim 1,  
wherein there is a plurality of libraries; and  
25 wherein the steps of creating, compiling and rebuilding are performed for each library of the plurality of libraries.

10. A method of saving as recited in claim 9,  
further comprising the step of, prior to the building step, selecting from the plurality of  
30 libraries a group of libraries needed for the building of the executable, each library in the group having a version object file; and

wherein building the executable includes:

- 5 creating a temporary storage area;
- obtaining the version object file from each of the selected libraries, each version object file having a name that includes a keyword and the name of the library in which the version object file resides;
- 10 storing each of the version object files in the temporary storage area;
- creating a list of the names of the stored version object files; and
- compiling into the executable each of the stored version object files in the list so that the executable contains any functions needed by the executable from each library in the group and the version and product information of each library of the group.

11. A method of saving as recited in claim 9,

- 15 further comprising the steps of: prior to the building of the executable,
  - selecting a group of libraries from the plurality of libraries, each library in the group having a version object file; and
  - building a compound library from the selected group of libraries, the compound library including a version object file for the compound library and the version object files of each library in the group; and
- 20 wherein the step of building the executable includes building an executable to include the compound library, such that the version and product information of the compound library and each library in the selected group are combined into the executable program.

12. A method of saving as recited in claim 11, wherein the step of building a compound library includes:

- 25 creating a temporary storage area for holding the object files of each library of the selected group and the version object file for the compound library;
- extracting all object files, including the version object files, from each library of the selected group;
- storing the extracted object files for all libraries of the selected group in the temporary storage area;

creating a version source file for the compound library, the version source file for the compound library containing version and product information pertaining to the compound library;

- 5                   compiling the version source file to create a version object file for the compound library;  
                  storing the version object file in the temporary storage area;  
                  building the compound library from the object files stored in the temporary storage area;  
                  saving the compound library in a library storage area; and  
                  deleting the temporary storage area.

10         13. A method of saving as recited in claim 9,

further comprising the steps of: prior to the building of the executable,  
                  selecting a group of libraries from the plurality of libraries, the group including at least one compound library, and each library in the group having at least one version object file;  
and

15                   building a multiple compound library from the selected group of libraries, the multiple compound library including a version object file for the multiple compound library and the version object files of each library in the group; and

20                   wherein the step of building the executable includes building an executable to include the multiple compound library, such that the version and product information of the multiple compound library and each library in the selected group are combined into the executable program.